We claim:

1. A method for maximizing the throughput of Transmission Control Protocol/Internet Protocol ("TCP/IP") data comprising the steps of:

estimating delay and rate variances associated with at least one wireless link;

modifying a receive window value of an acknowledgment packet; and

transmitting a modified acknowledgment packet containing the modified receive window value to a source of TCP/IP data.

2. The method as in claim 1 further comprising the steps of:

receiving the modified acknowledgement packet;

comparing the receive window value within the modified acknowledgement packet to a congestion window value;

selecting the lesser of the receive window value and congestion window value; and

transmitting an amount of data toward the wireless link based on the selected value.

3. The method as in claim 1 wherein the receive window value comprises a number of packets.

4. The method as in claim 3 wherein the number of packets is substantially within the range of 1 kilobyte to 64 kilobytes.

5. A method for maximizing the throughput of TCP/IP data comprising the steps of:

determining whether a data buffer is substantially close to empty;

determining whether delay and rate variances have substantially changed; and

storing one or more ACKs when said buffer is not substantially close to empty or when said variances have not substantially changed.

6. The method as in claim 5 further comprising

modifying a receive window value of an ACK packet when said buffer is substantially close to empty or when said variances have substantially changed; and

transmitting a modified ACK packet containing the modified receive window value to a source of TCP/IP data when said buffer is substantially close to empty or when said variances have substantially changed.

7. A system for maximizing the throughput of Transmission Control Protocol/Internet Protocol ("TCP/IP") data comprising a radio network controller (RNC) operable to:

estimate delay and rate variances associated with at least one wireless link;

modify a receive window value of an acknowledgment packet; and

transmit a modified acknowledgment packet containing the modified receive window value to a source of TCP/IP data.

8. The system as in claim 7 further comprising a data source operable to:

receive the modified acknowledgement packet;

compare the receive window value within the modified acknowledgement packet to a congestion window value;

select the lesser of the receive window value and congestion window value; and

transmit an amount of data toward the wireless link based on the selected value.

9. The system as in claim 7 wherein the receive window value comprises a number of packets.

10. The system as in claim 9 wherein the number of packets is substantially within the range of 1 kilobyte to 64 kilobytes.

11. A device for maximizing the throughput of TCP/IP data operable to:

determine whether a data buffer is substantially close to empty;

determine whether delay and rate variances have substantially changed; and

store one or more ACKs when said buffer is not substantially close to empty or when said variances have not substantially changed.

12. The device as in claim 11 further operable to:

modify a receive window value of an ACK packet when said buffer is substantially close to empty or when said variances have substantially changed; and

transmit a modified ACK packet containing the modified receive window value to a source of TCP/IP data when said buffer is substantially close to empty or when said variances have substantially changed.